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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/783,355	02/20/2004	Sangkeun Rhee	H0004592 (4760)	7712

7590 03/01/2006

Richard S. Roberts
Roberts & Roberts, L.L.P.
Attorneys at Law
P.O. Box 484
Princeton, NJ 08542-0484

EXAMINER

ZACHARIA, RAMSEY E

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 03/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/783,355

Applicant(s)

RHEE ET AL.

Examiner

Ramsey Zacharia

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 and 50-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-48 and 50-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Language

2. There appears to be a typographical error in claim 18 which appears to depend from claim 1. However, this dependency is not positively recited. The applicant is requested to correct this issue.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 36-43, 46, 47, 50, and 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Tasaka (U.S. Patent 5,936,037).

Tasaka teaches a composition which comprise 100 parts by weight of block copolymer (a), 1-150 parts olefinic resin (c), and 0-100 parts hydrogenated petroleum resin (f) (column 3, lines 10-46). Examples of block copolymer (a) include SBS, SIS, SEBS, and SEPS, which may optionally be hydrogenated (column 9, lines 6-7). The olefinic resin may be linear low density

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polyethylene (i.e. polymer of ethylene and an α -olefin such as butene, hexene, or octene) or an ethylene propylene copolymer (column 10, lines 3-19). In the embodiment of Example 8, the block copolymer comprises about 15 wt% and the hydrogenated petroleum resin comprises about 2 wt% of the composition.

The composition is required to have: 100 parts block copolymer, 20-300 parts softening agent, 1-150 parts of the olefinic resin (c), 10-150 parts of a second olefinic resin, and 0-100 parts of the hydrogenated petroleum resin. That is, the composition taught by Tasaka may comprise up to about 53 wt% of the olefinic resin (c) and up to 43 wt% of the hydrogenated petroleum resin.

5. Claims 36-43, 46-48, 50, and 51 are rejected under 35 U.S.C. 102(e) as being anticipated by Quinn et al. (U.S. Patent 6,582,829).

Quinn et al. teach a composition comprising 5-50 wt% of an ethylene/ α -olefin copolymer, 1-40 wt% of a block copolymer, and 10-75 wt% of a tackifying resin (abstract). The α -olefin is a C_3 - C_{20} α -olefin (column 3, lines 1-2). The block copolymer may have a A-B-A structure wherein the A block is styrene and the B block may be isoprene, ethylene/butylene, or butadiene and may be hydrogenated (column 6, lines 27-42). The tackifying resin may be a rosin polymer, a rosin ester, a terpene, a petroleum polymer, or a styrene polymer and may be hydrogenated (column 7, line 64-column 8, line 17).

Claim Rejections - 35 USC § 103

6. Claims 44 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Quinn et al. (U.S. Patent 6,582,829).

Quinn et al. teach all the limitations of claims 44 and 45, except for specifying that the ethylene/ α -olefin copolymer is present in an amount of from about 75-85 wt%.

While Quinn et al. teach 50 wt% as a typical upper limit, the ethylene/ α -olefin copolymer is only required to be greater than about 5 wt% of the composition (column 5, lines 22-29).

Because Quinn et al. explicitly teach that the concentration of the ethylene/ α -olefin copolymer may be any value greater than about 5 wt%, it would have been obvious to one skilled in the art to optimize the concentration of the ethylene/ α -olefin copolymer within the disclosed range.

7. Claims 36-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al. (JP 09-302,319 A).

Sato et al. teaches an adhesive composition comprising 10-80 wt% of ethylene- α -olefin copolymer, 1-50 wt% of a styrene-ethylene-propylene-styrene block copolymer, and 19-60 wt% of a tackifier (abstract). The tackifier may be a petroleum resin (paragraph 0036). The α -olefin has 3-30 carbon atoms (paragraph 0012).

Sato et al. teach the use of styrene-ethylene-propylene-styrene copolymer (SEPS) but not one of the styrene block copolymer recited in claim 36. Sato et al. teach that a middle block of ethylene-propylene is desirable over blocks such as isoprene or butadiene because the backbone

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of the resulting polymer is the same as the ethylene- α olefin copolymer (paragraph 0033). This results in enhanced miscibility, leading to improved adhesion.

Therefore, it would be obvious to one skilled in the art to use any styrene block copolymer having ethylene and propylene as the middle block, including styrene/ethylene ethylene-propylene random/styrene block copolymer, because one skilled in the art would expect to achieve the same degree of miscibility and resultant improved adhesion.

8. Claims 1-35 and 52-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al. (US 2004/0197567) in view of Ikeda et al. (EP 857,758 A1).

Tsai et al. teach a coextruded multilayer film comprising a layer of fluoropolymer, layer of cyclic olefin, and an adhesive layer (paragraph 0008). The fluoropolymer may be a homopolymer or copolymer of chlorotrifluoroethylene (paragraph 0014). Additional layers (comprising polymers such as polyolefin, polyvinyl chloride, and polyvinylidene chloride) may be attached to the fluoropolymer layer or cyclic olefin layer directly or by an adhesive (paragraph 0018). The film may be uniaxially or biaxially oriented about 1.5 to 10 times in either/each direction and thermoformed to produce blister packs for pharmaceuticals (paragraph 0023). The film may also be formed into pouches (paragraph 0039). The film may be formed by a blown coextrusion process (paragraph 0021).

Regarding claims 35, 55, and 61, a pouch reads on a tube since a pouch is merely a tube having one end closed off.

Tsai et al. do not teach the use of an adhesive comprising a styrene block copolymer, a tackifier, and an ethylene- α -olefin copolymer.

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Ikeda et al. teach an adhesive composition comprising 50-99 parts of a hydrogenated block copolymer, 1 to 50 parts of a tackifier, and 10-1000 parts of an ethylenic polymer (page 3, lines 35-43). The hydrogenated block copolymer may be of the general formula A-B-A wherein A is styrene and B is isoprene or butadiene (page 4, lines 27-39). Hydrogenated styrene/butadiene/styrene is styrene/ethylene butylene/styrene copolymer. The tackifier may be a petroleum or a terpene resin (page 5, lines 35-37). The ethylenic polymer may be an ethylene- α -olefin copolymer wherein the α -olefin has 3-20 carbon atoms (page 6, lines 3-10). The adhesive may be used in film packaging materials used for foods or pharmaceutical products (page 9, lines 44-49).

It would be obvious to one skilled in the art to use the adhesive of Ikeda et al. as the adhesive for the film of Tsai et al. because Ikeda et al. teach that their adhesive may be used for packaging materials for pharmaceutical products. It has been held that the selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination. See MPEP 2144.07.

Response to Arguments

9. Applicant's arguments filed 05 December 2005 with respect to the rejection over Tsai et al. in view of Ikeda et al. have been fully considered but they are not persuasive.

The applicants argue that Ikeda et al. does not describe a film structure including a fluoropolymer layer and Tsai et al. incorporate a specialized adhesive tie layer that is very different than the claimed adhesive. The applicants further argue that there is no teaching or suggestion to combine the films of Tsai et al. with the adhesive composition of Ikeda et al.

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This is not persuasive because the adhesive of Ikeda et al. is described as an adhesive that may be used in film packaging materials used for pharmaceutical products. The multilayer film Tsai et al. is also designed for use as a pharmaceutical packaging material and the adhesive used by Tsai et al. is not a specialized tie layer. Rather, paragraph 0015 of Tsai et al. describes some adhesives, including adhesives comprising polyolefins and adhesives comprising carboxylic acid/anhydride functional groups, and explicitly states that the disclosed adhesives are non-exclusive. Because Tsai et al. teach the use of an adhesive for their pharmaceutical packaging that is not limited to the adhesives cited therein and because Ikeda et al. teach an adhesive that is explicitly designed to be used in pharmaceutical packaging, one skilled in the art would be motivated to use the adhesive of Ikeda et al. in the pharmaceutical packaging of Tsai et al. as it has been held that the selection of a known material based on its suitability for its intended use supports a *prima facie* obviousness determination. See MPEP 2144.07.

The applicants argue that there is no evidence in the Ikeda et al. reference that their adhesive would be compatible with fluoropolymer or sufficient to adhere a fluoropolymer layer to another polymer layer.

This is not persuasive because Tsai et al. describes suitable adhesives comprising polyolefins and/or carboxylic functional groups and the adhesive of Ikeda et al. comprises a polyolefin and carboxylic functional groups. As such, one skilled in the art would expect the polyolefin and carboxylic functional group containing adhesive of Ikeda et al. to perform as the tie layer in the film of Tsai et al.

The applicants compare bond strengths disclosed in Tsai et al. with bond strengths reported in the instant specification to illustrate that the inventive films exhibits superior delamination resistance over the films of Tsai et al.

This is not persuasive for at least the reason that the showings of Examples 2 and 3 in the specification are not commensurate in scope with the invention as claimed. For example, the films of both Examples 2 and 3 comprise PCTFE adhered to a cyclic olefin copolymer by means of a tie layer composed of 82 wt% ethylene copolymer, 15 wt% tackifier, and 3 wt% of particular styrene block copolymers. This is in contrast to the claimed film, which requires only a fluoropolymer layer, a thermoplastic polymer layer, and an adhesive having any amount of ethylene copolymer, tackifier, and styrene block copolymer. In order to overcome an obviousness type rejection by relying on unexpected results, the objective evidence of nonobviousness must be commensurate in scope with the claims which the evidence is offered to support. See MPEP 716.02(d).

The applicants further argue that the belief that one skilled in the art could form the claimed invention does not suggest that one should form such a film. That a reference can be modified does not render the resulting combination obvious unless the prior art suggests the desirability of the combination and such a suggestion is alleged to be absent.

However, the courts have held that the selection of a known material based on its suitability for its intended use supports a *prima facie* obviousness determination. See MPEP 2144.07. In the present case, the multilayer film of Tsai et al. is a pharmaceutical packaging requiring an adhesive and the adhesive of Ikeda et al. is explicitly taught as suitable for use in pharmaceutical packaging.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

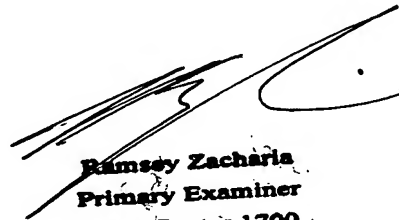
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (571) 272-1518. The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney, can be reached at (571) 272-1284. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ramsey Zacharia
Primary Examiner
Tech Center 1700